



Some science-policy-society views from inside and outside of the tent – participatory approaches and wicked water resource management problems

Ken Hughey

Department of Environmental Management, Lincoln University

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Some context

- As an environmental advocate, involved in ‘wicked’ water-related environmental issues since around 1980
- Over the past 2 decades been involved in 2 significant collaborative processes involving:
 - Te Waihora Lake Ellesmere (NZ’s 5th largest lake)(as a member of the Waihora Ellesmere Trust Board, and on multiple working parties associated with the lake)
 - since 2010 as a foundation member of the Hurunui Waiau Water Zone Ctte (one of 10 established by the Canterbury Mayoral Forum under the Canterbury Water Management Strategy – I am now chair)
- I have researched collaboratively with colleagues at the Sustainability Research Centre (University of the Sunshine Coast) on a range of collaborative approaches in Australia and New Zealand
- From all of this what insights have I gained?

From inside the tent – some challenges

- Constant changes in the institutional (including policy) arrangements, while the people on the ground are always the same!
- Policy writers who think they know best and who don't understand systems
- The scientists who think they can write policy
- Struggle to reconcile the different baskets of knowledge, and move forward
- Lack of an integrated learning culture
- Ongoing inability to deal with complexity within a well-being framework
- An emerging struggle to operationalise mauri (life force) in meaningful ways
- A need for certainty in an uncertain world
- The challenge of time (frames) and transition times
- Increasing reliance on tools with questionable credibility – 'Overseer'
- How to 'Keep it simple stupid' when complexity reigns supreme
- To try and address the above we have coined the phrase 'The Hurunui Way'

From outside of the tent – some thoughts

(based on Hughey, K.F.D., Jacobson, C., Smith, E.F. 2017. A framework for comparing collaborative management of Australian and New Zealand water resources. Ecology and Society 22 (4):28. [online] URL: <https://www.ecologyandsociety.org/vol22/iss4/art28/>)

- Incredible range of collaborative top-down and bottom up approaches in NZ, Australia and globally
- What is the scope of these initiatives, who should be involved, etc?
- Emerging role of Māori – co-governance (e.g., Waikato and Te Waihora); Te ao Māori approaches
- Lack of a clear learning culture incorporating feedback loops
- Huge focus on outputs and processes but do they deliver tangible outcomes, i.e., social capital over natural capital
- Range of power relationships on a continuum from consultation-based to co-governance empowered – these strongly influence outcome focus
- Hard to determine how science informs understanding (and what this looks like) and in turn leads to policy

A few concluding comments, freshwater related

- Current govt in a hurry to 'fix' freshwater, to make it swimmable etc
- But the 'bad' things took time to get bad and were driven by govt signals, e.g., grow production
- And the 'bad' things are linked to lingering consequences, e.g., 'grand-parenting', which makes it difficult to 'correct' quickly
- Collaborative processes do have the potential to 'turn things around', over time, but where and how does science fit into the mix and how does the community make sense of the science (and broader baskets of knowledge) interfaces with policy and regulation?
- In the face of these issues I leave you with some work in progress, that I presented to a strategy session of the Hurunui Waiau ZC, on Monday in Waiau, North Canterbury ...

Waiau Uwha – context for overall ZC strategy thinking

	Upper	Middle	Lower
Gifts	- Preservation of flows to NZ	- Flows to irrigated farmers - Riverbed land to neighbouring farmers	- Flows to irrigated farmers - Riverbed land to neighbouring farmers
Gains	- Conservation and recreation for all NZers	- Economic gain for irrigated farmers - Community diversity & resilience	- Economic gain for irrigated farmers - Community diversity & resilience
Surpluses	- Conservation & Recreation and mauri	- Economic gain for irrigated farmers, communities & district	- Economic gain for irrigated farmers, communities & district
Deficits/ opportunities	- Water storage options - Economic resilience - Wetlands loss - Weeds in riverbed reducing habitat	- Low flows bad for ecology/ recreation - Weeds etc bad for flood control and ecology - Lowland streams loss bad for mahinga kai etc - Wetlands loss - Mauri ‘breakdown’ - Dryland farmer resilience	- Low flows bad for ecology/ recreation - Weeds etc bad for flood control and ecology - Lowland streams loss bad for mahinga kai etc - Wetlands loss - Recreation access - Native fish habitat – whitebait/inanga - Mauri breakdown - Dryland farmer resilience
Questions		- Water quality – where are we on the Waiau Uwha?	- Water quality – where are we on the Waiau Uwha?

